START

0022991

9205936

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

7601 W. Clearwater, Suite 102 • Kennewick, Washington 99336 • (509)

August 7, 1992

Mr. Paul Beaver
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, WA 99352

Dear Mr. Beaver:

Re: B Plant Source Aggregate Area Management Study Report Review

The Department of Ecology personnel have completed the review of the B Plant Source Aggregate Area Management Study Report. Attached are the chapter-specific comments in hardcopy form and a diskette in WordPerfect 5.1 format.

We have restricted our review to those sections that directly apply to B Plant, as directed in the cover letter attached to the original study report. We expect our comments on the generic text in the U and Z Plants AAMSRs, as well as in the S and T Plants and PUREX AAMSRs, to be considered for incorporation into the generic text of the B Plant report. Please remind the Department of Energy personnel that the generic section comments have not been formally accepted by regulatory personnel for inclusion into the final AAMSRs.

In addition, we suggest reminding the Department of Energy personnel that comment resolution to the regulatory review is anticipated 30 days from receiving the comments for secondary documents. A comment resolution meeting is suggested at that time.

If you have any questions, please do not hesitate to call me at (509)546-2999.

Sincerely,

Nancy Uziemblo
Unit Manager
Nuclear and Mixed Waste Management Program

NU:mf
Enclosure

cc: Larry Goldstein, Ecology
Dave Nylander, Ecology
Darci Teel, Ecology
Tim Veneziano, WHC Administrative Records

REVIEW OF THE B PLANT SOURCE

AGGREGATE AREA MANAGEMENT STUDY REPORT

DOE/RL-92-05 DRAFT A

Specific Comments

CHAPTER 1

All of Chapter 1 is marked as generic text. See S, T, and U Plant and PUREX AAMSRs for comments.

CHAPTER 2

1. Section 2.3.1 Page 2-5, lines 29-32
   Provide a schedule for discussion of closure process for buildings and structures located within the aggregate area but not addressed in this document.

2. Section 2.3.1 Page 2-6, lines 1-2
   Figure 1-3 does not show any buildings and structures as mentioned in the text. The figure needs to be modified to illustrate these buildings and structures.

3. Section 2.3.1.1.3 Page 2-8, lines 23-26
   According to the text, the source wastes will be addressed under a separate decommissioning and decontamination program. A list of the various source wastes located within the B Plant aggregate area should be provided at the beginning of this chapter under section 2.3, and the reason(s) for not including them in this document must given to avoid confusion and misinterpretation.

4. Section 2.3.2.1.2 Page 2-13, lines 16-17
   The text states, "The . . . tank has undergone initial stabilization and interim isolation and considered sound." Provide the date of interim isolation. Provide the type of integrity tests used and the date they were conducted. This comment is applicable for other SSTs described in the text.

5. Section 2.3.2.3 Page 2-24
   The text describing the tank farms does not mention the presence of any radiation monitoring wells. The reason for not having any monitoring wells should be stated.

6. Section 2.3.2.5 Page 2-30, lines 40-41
   Provide the volume of the unplanned release.

7. Section 2.3.2.8 Page 2-31, lines 26-27
   Provide the volume of the unplanned release. This comment is applicable for other unplanned releases.

8. Section 2.3.2.10 Page 2-32, lines 20-22
   Provide adequate reason(s) why the release potential for radiological hazards are high in 241-B-361 Settling Tank compared to other 200 Area waste management units even after interim stabilization.

9. Section 2.3.2.12 Page 2-33, lines 24-25
   Provide the results of the leak detection and air monitoring.

CHAPTER 3

10. Section 3.3.3 Page 3-5, first paragraph
    The surface hydrology should specifically mention that the 216-N-8 natural pond is fed by the 216-A-25 Gable Mountain Pond. Also, the text does not mention how the Gable Mountain Pond (216-A-25) was filled, the quality of water, and its source. A map showing the locations of 216-A-25 and 216-N-8 ponds should accompany the text for clarification.

11. Section 3.3.3 Page 3-5, lines 35-38
    Figures 2-1 and 2-5 do not show the locations of various ponds such as 216-B-3, 216-B-3A, 216-B-3C, etc., as mentioned in the text. Cite where these ponds are depicted.

12. Section 3.4.3,
    Please see comments provided with the PUREX and S Plant AAMSR review for this section.

13. Section 3.5.3.1.2 Page 3-31, lines 7-9
    Clarify "proper grain size" and "intercalated lenses". Terms like permeable vs. impermeable, and aquifer vs. aquitard are more appropriate and should be used in discussing hydrogeology.

14. Section 3.5.3.1.2 Page 3-31, lines 11-18 (second paragraph)
    Information stated in the second paragraph contradicts statements made in the first paragraph of Section 3.5.3.1.2. The first paragraph states that the likelihood of perched water in the 200 East Area is low; however, the text in the second paragraph describes the presence of perched water which was identified in several boreholes. Clarify Section 3.5.3.1.2 with respect to perched water zones.

15. Section 3.5.3.1.2 Page 3-31, lines 11-18
    Provide evidence for the movement of perched water towards the southeast. Include a perched water table map of the area if available. State if perched water direction was determined from the wells drilled.

16. Section 3.5.3.2 Page 3-31
Identify the recharge caused by the filling of the 216-A-25 pond (Gable Mountain Pond). In addition, describe the type of water (e.g., wastewater) discharged into the Gable Mountain Pond.

17. Figure 3-15 Page 3F-15
Several cross sections contain a unit marked as "EM" which is not described in the legend in Figure 3-15. Provide an explanation for EM.

CHAPTER 4

The conceptual model discussed in Chapter 4 is under review by both U.S.G.S. and Ecology Staff. Specifically, the retention of contaminants (30 years or permanently) is under discussion with respect to Bierschenk, W.H., 1959, *Techniques for Estimating the Specific Retention Properties of Hanford Soils* (HW-61644, General Electric, Hanford Atomic Products Operation, Richland, Washington). Comments on Chapter 4 will be supplied during the comment resolution period.

CHAPTER 5

18. Section 5.2.2 Page 5-5, lines 10-12
The text states that posting and access controls are to be implemented at a level of 100 ct/min above background beta/gamma, and/or 20 ct/min alpha, for the purpose of personnel protection. However, the current WHC Radiological Worker II Training Manual lists allowable contamination limits for personnel as 100 ct/min above background beta/gama and 3 ct/min alpha. Determine if the limits listed in this Training Manual should be used for the criteria for posting and access control and identification of high priority waste management units.

19. Section 5.3 Page 5-6, lines 29-33
The text refers to criteria used in the HRS scoring. Certain criteria have changed since the finalization of the HRS on December 14, 1990. Explain if the scoring was conducted by using the old or new system.

20. Section 5.3 Page 5-6, line 31
The reference in the first paragraph of section 5.3 to "DOE 1988" is presumably to "DOE 1988b." This reference to the Site Characterization Plan does not seem to be correct. Provide the volume, section, and page number of the correct reference.

21. Section 5.3 Page 5-6, lines 32-33 and Table 5-1, Page 5T-1a
Provide the criteria used to prioritize sites as assigned by the Westinghouse Environmental Protection Group scoring system. Only three units appear to have WEPG scores in the table.

22. Section 5.3 Page 5-7, lines 5-8

The text should indicate which HRS scores did not take into account mHRS criteria. The text should clarify that the previous HRS did not consider these factors.

23. Section 5.3 Page 5-7, lines 12-22

The fourth paragraph of section 5.3 does not specify who assigned the scores in Table 5-1. Table 5-1 does not indicate which of the rankings were derived from an authoritative reference, and which were assigned based on similarity.

Specify which of the rankings were derived from an authoritative reference, and which were assigned based on similarity. Specify who assigned the scores in Table 5-1. Specify which ranked unit was used as the analog for which analogously ranked unit. Put the analogously ranked units in a separate column (with the qualitatively ranked units), perhaps with explanatory footnotes.

24. Section 5.3 Page 5-7, lines 24-33

The fifth paragraph of section 5.3 does not quantitatively specify the discharge volume used for assigning a qualitative indicator of migration potential. Specify this volume. An additional criteria of radioactive inventory should be added to determine priority of sites. Put the qualitatively ranked units in a separate column (with the analogously ranked units), perhaps with explanatory footnotes.

25. Section 5.4 Page 5-8, lines 6-7

If the contamination limits for personnel protection are 100 ct/min above background beta/gama and 3 ct/min alpha, the criteria used for the identification of high priority waste management units should be changed.

26. Table 5-1 Page 5T-1a-h

Ecology will conduct a site-by-site review of Table 5-1 when the above points are clarified.

CHAPTER 6

All of Chapter 6 is marked as generic text. See S, T, and U Plant and PUREX AAMSRs for comments.

CHAPTER 7

27. Section 7.5 Page 7-13, line 40

The text indicates Alternative 3 (excavation and soil treatment) may not be applicable to treat volatile organic compounds. However, it is reported in Section 7.4.4, Alternative 3--Excavation, Soil Treatment, and Disposal, that thermal desorption with off-gas treatment could be used if organic compounds are present. The text should be changed to include volatile organic compounds in Alternative 3.

CHAPTER 8

28. Section 8.1.3 Page 8-10, lines 26-28
The following text needs to be revised: "The best indication of the validity of the data is the reproducibility of the results, and this indicates that validity (completeness) is one of the less significant problems with the data." Reproducibility of results does not "validate" the data, this only indicates that the methodology can be reproduced, whether it is reproduced correctly or not. To truly "validate" data, instrument calibrations and blanks, standards, matrix spikes, and other QA/QC protocols should be followed.

29. Section 8.1.3 Page 8-11, line 2
This should read "...possible, where contamination may or may not be present."

30. Section 8.3.1 Page 8-22, line 28
The sentence should read "Although existing data are unvalidatable, the data ..."

31. Section 8.3.2 Page 8-23.
The possibility of using a mobile lab for Level II analysis of organics and inorganics should also be addressed here.

32. Table 8-4, Pages 8T-4a through 8T-4e.
The organic and inorganic analysis methods should list both SW-846 and CLP methodologies.

CHAPTER 9

33. Section 9.1 Page 9-3, first paragraph
The criteria for an ERA should include expediency/cost-savings. ERA candidate sites may be selected because taking action now will likely result in considerable cost-savings or increased safety for site-workers.

34. Section 9.1 Page 9-3, lines 32-36
A rationale should be provided for using surface contamination greater than 2 mR/hr for exposure rate, 100 count/min beta/gamma above background, alpha greater than 20 ct/min, or Environmental Protection Program ranking of greater than 7 to designate a site as an interim remedial measure (IRM) candidate.

35. Section 9.2.1.1 Page 9-10 through -11
If these cribs and trenches are ERA candidates, and of "catastrophic" concern, state what is being done today to control surface contamination and the release of radionuclides to on-site workers and biota.

36. Section 9.2.3.6 Page 9-16, line 20

Fourteen unplanned releases are stated; however, fifteen releases are cited in lines 24-38.

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
N. Uziemblo, Ecology	P. Beaver, EPA Region 10 Kennewick Office	Incoming: 9205936

Subject: B PLANT SOURCE AGGREGATE AREA MANAGEMENT STUDY REPORT REVIEW

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		President's Office		
		M. R. Adams	H4-55	X
		L. D. Arnold	B2-35	X
		S. L. Bradley	B3-06	
		R. A. Carlson	H4-55	
		G. D. Carpenter	B2-16	
		C. K. DiSibio	B3-03	
		D. B. Erb	H4-55	X
		K. R. Fecht	H4-56	
		M. J. Galgoul	H4-55	
		C. J. Geier	B2-19	
		R. P. Henckel	H4-55	
		W. L. Johnson	H4-55	
		M J. Lauterbach	H4-55	
		R. E. Lerch, Assignee	B2-35	
		P. J. Mackey	B3-15	X
		J. C. Midgett	S6-15	
		H. E. McGuire, Level 1	B3-63	
		W. H. Price	N3-05	
		T. B. Veneziano	B2-35	
		T. M. Wintczak	L4-92	X
		R. D. Wojtasek	L4-92	X
		J. G. Woolard	H4-55	
		EDMC	H4-22	X